**IMPULSE** 

#### **Impulse Telecommunications Corporation**

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May 27, 1994

Mr. William F. Caton Acting Secretary Federal Communications Commission 1919 M Street, N.W., Room 222 Washington, DC 20554 STOP CODE: 1170

MAY 2 7 1994 FEDERAL COMMUNICATIONS COMMISSION OFFICE OF SYCHETARY

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Re: Ex Parte Presentation in PP Docket No. 93-253

Dear Mr. Caton:

This notice is given as required by Section 1.1206(a)(2) of the Commission's rules. An original and one copy of this letter and its attachments are being filed.

This morning, the undersigned, other executives of Impulse Telecommunications, Inc. ("Impulse"), and its counsel met with William Kennard, General Counsel of the FCC, and Sara Seidman, Special Assistant to Mr. Kennard, to discuss Impulse's positions regarding the above-referenced proceeding. In particular, Impulse emphasized the need for the FCC to adopt rules that give small businesses the opportunity to raise capital and participate meaningfully in auctions for broadband Personal Communications Services. Attached hereto is a copy of documents made available during the meeting, which outline Impulse's presentation.

If there are any questions regarding this matter, please contact the undersigned.

Respectfully submitted,

Edward France

Edward E. Jungerman

President

Attachments

William Kennard, Esq. (w/o att.) Sara Seidman, Esq. (w/o att.)

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## SWMR Participation in Broadband PCS

Ex parte Presentation to the FCC PP Docket No. 93-253 May 27, 1994

Edward E. Jungerman, President C. Jackson Pfeffer, Vice President Lewis S. White, Vice President

Impulse Telecommunications Corporation

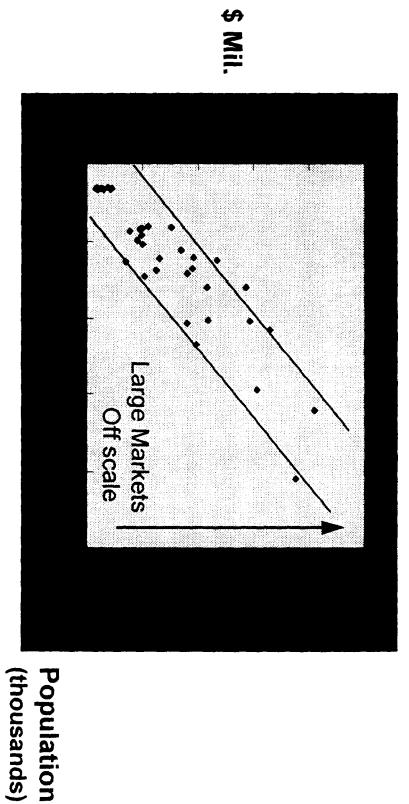
12720 Hillcrest Road, Suite 1020 Dallas, Texas 75230 (214) 490-8847 Fax: (214) 490-9061 CHANCE OF BEOMETERS

#### Impulse Telecommunications Corporation

- \* A Small Business
- Since 1986
  - Strategic Consulting & Engineering
- \* Since 1990: PCS Focus
  - Strategic & Business Planning
  - Systems Design & Engineering
  - Market Research
  - Regulatory Support
  - Wireless Industry Simulation Tool (WIST)
- Support to over 60 Clients

Impulse has PCS Expertise

# Representative BTA License Values



Major Market Values are High

#### Giants can Justify Huge Bids

#### Billions of Capital

- AT&T/ McCaw
- Bell Atlantic/ TCI
- MCI/ British Tel

#### Strategic Value

- Critical wireless access
- Deny market to competitor

#### In-place Assets Permit Incremental Analysis

- Admin., billing, operations, marketing
- Other business interests
- Existing facilities

| Example: AT&T/McCaw |  |
|---------------------|--|
| \$12.6              |  |
| <u>8.5</u>          |  |
| 21.1                |  |
| (3.5)               |  |
| \$17.6              |  |
| Billions            |  |
|                     |  |

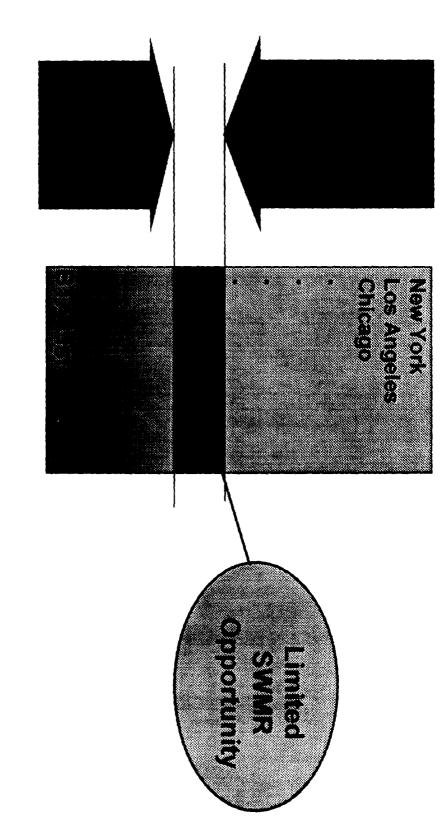
#### Bidding Against Giants

- \* SWMR Risk capital: 35% IRR (or more) required
- \* Giants cost of capital: 12 to 15%
- \* Giants have access to abundant debt & equity
- Conclusion: SWMRs need help to bid successfully

#### SWMR Requirements for Participation

- Need 20 30 MHz to be Viable
  - 10 MHz cannot compete with cellular
- Need Access to Larger Markets
  - Support multi-party competition
  - Cost threshold
  - Attract capital
  - Facilitate national SWMR "Roamer" cooperation

# Can SWMRs Get on the Field?



SWMR Participation Very Limited

# How SWMRs Get On Field New York Los Angeles Chicago

Revised Rules = Enhanced SWMR opportunity

#### Reduce Down Payment

- Commission adopted 20 % rule for Narrowband PCS
- Broadband PCS bids will be far higher
- Recommend 5% down payment requirement

- Change Small Business Definition to \$40 Million Revenue
  - \$6 Million Net Worth test limits access to equity
  - Is especially unfair to established small businesses
  - Revenue test provides flexibility in capital formation

### Allow Pre-arranged Financing Commitments for Bid

- Should not affect "small business" status
- Should not trigger affiliation rules
  - ◆ No ultimate source greater than 10%
  - ◆ Look at investors in "Funds" in applying 10% test
- Exempt convertible securities exercisable after 5 years

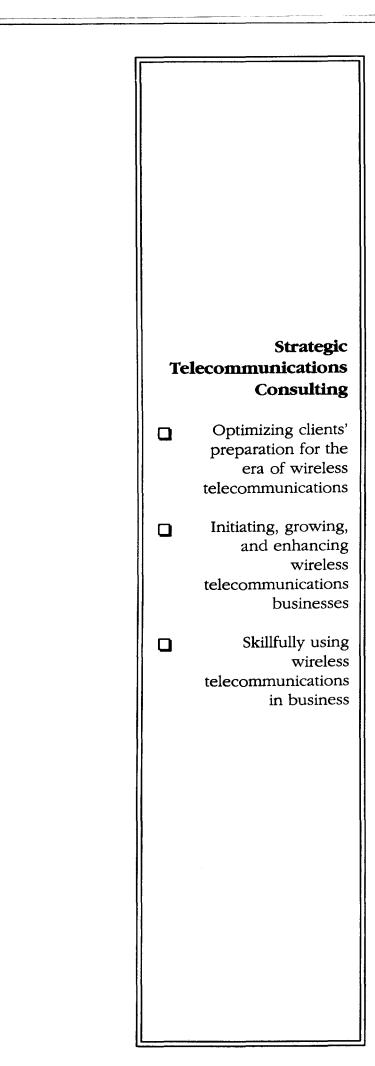
#### Adopt Unjust Enrichment Protections

- Prohibit transfer of license before 5 years
- Recover <u>full</u> <u>value</u> of any and all preferences
- Collect interest on the preference value

### Leading the Way Into the Wireless Future

#### Our Distinctive Competence

An in-depth understanding of the wireless telecommunications industry: the technology, the markets, the service offerings, the sales and distribution processes, and the related financial, operational, and regulatory considerations seasoned with the experience to apply this understanding on our clients' behalf.



#### FOCUS: WIRELESS TELECOMMUNIO

#### Strategy and Planning

#### **Business Planning**

Development of strategic and operational plans including comprehensive business plans, product or service plans, marketing strategies and competitive assessments.

#### New Opportunity Identification

Determination of new wireless product, service, or business opportunities based on an evaluation of the positioning and capabilities of the client organization and an understanding of the marketplace, the technology and the competitive environment.

#### **Business Assessment**

Acquisition, financing, investment, and due diligence evaluations with a focus on the validation of marketing, financial, technical and strategic assumptions. Includes operating cost analysis/cost reduction programs when appropriate.

#### Marketing

#### Market Sizing

Assessment of market potential including primary and secondary research.

#### Competition

Sizing up of competition and potential competitive challenges.

#### **Products and Services**

Product/service definition and positioning, marketing and sales program development. Includes feature description and product specification documentation.

#### Implementation

Marketing and sales program development, and complete marketing materials development including brochures and service descriptions.

#### **Technology**

#### Application

Definition, assessment, and selection of appropriate technologies to satisfy specific wireless application requirements. Specification generation and development process supervision.

#### Design and Engineering

Analysis and design of wireless telecommunications system or network solutions. Systems-level design and engineering. Development of requests for proposal and management of the procurement and implementation processes.

#### CATIONS

#### **Wireless Products**

#### Strategic Insight Vistas

These one-day, private seminars offer clients the latest information on timely wireless industry topics. The PCSComm seminar presents a comprehensive view of a hypothetical start-up PCS service provider. Emerging Wireless Marketplace seminars offer clients a composite of all emerging activity in the wireless marketplace.

#### WIST

Structured to simulate PCS and its interaction with the cellular industry, the PC-based *Wireless Industry* 'Simulation Tool is used to forecast industry scenarios based on several thousand possible parameters. *WIST* permits the analysis of financial, operational, and technical results of encounters between PCS and cellular, as well as for LECs, IXCs and equipment manufacturers. *WIST* also supports analysis of bidding strategies for PCS licenses.

#### **Publications**

Impulse's nationwide study of how frequency spectrum might be shared is documented in two companion reports called *Spectral Zone Coordination: Fast Track to PCN?* These reports are subtitled *Strategic Insight Report* and *Engineering Reference and Study Findings*. Early among PCN's references, Impulse published *PCN: The Future of Telecommunications?*, which has become a fundamental source of information to the industry.

#### Expertise

#### Personal

#### Communications Services

Strategic, economic and impact analysis of PCN/PCS, paging, Telepoint, and other wireless voice and data service initiatives.

#### Network Services

Local, long distance, and international voice, data and enhanced services.

#### Advanced Telecommunications Products

Switching, signaling, wireless PBX and transmission. Enhanced services processors and platforms.

#### **Emerging Wireless Technologies**

PCN, wireless PBX, and wireless data network techniques with special emphasis on U.S. cellular architectures and DCS-1800 (GSM), CT-2/Telepoint, and DECT.

#### Cell-Site Interconnection

Application of broadband (CATV, SONET) and radio-based technologies for cell-site interconnection with emphasis on applications and economic analysis.

#### Network

Public and private voice, data, metropolitan, and cellular network technologies. Includes switching, fiber, radio, and satellite transmission systems and equipment. Special emphasis on Intelligent Network and SS-7 technologies as they apply to wireless networks.

#### Clients

In the last seven years, Impulse's client base has included major telecommunications carriers, and service providers. telecommunications equipment manufacturers, venture capital firms, investment bankers, and end-users of telecommunications products and services. The company has also completed several engagements of significant international scope.

#### CONSULTING STAFF

#### **EDWARD E. JUNGERMAN**

#### President

Twenty-seven years of executive management background in the telecommunications field.

General management responsibilities were preceded by marketing, business development, operations, hardware and software engineering, and management roles in both large and small organizations. BS in electrical engineering.

#### W.R.R. HAINES

#### Principal European Affiliate

Over 35 years' experience in European and worldwide communications and related high-technology fields. Served on boards of directors of 11 companies including Cable & Wireless PLC, Cray Electronics PLC, and various subsidiaries of Plessey Company PLC.

#### HAROLD M. COPPERMAN

#### Vice Chairman

Over 30 years' experience in telecommunications and information systems. Background includes chief executive and senior level management of marketing and operations with both large and small multinational organizations such as Electronic Data Systems, Advanced Business Communications, Northern Telecom, Stromberg Carlson, and ITT.

#### DAVID R. DEETZ

#### Vice President

Twenty-seven years' experience in telecommunications and personal computer hardware and software general management, and engineering and program management.

Areas of expertise include telecommunications economics, cellular and wireless network architectures and technologies, spectrum engineering, and switching systems. BSEE, MS, and MBA.

#### C. KONRAD SCHROTH

Director of PCS Systems
System, Product and Service
Definition, Design and Market
Analysis

Thirty-three years' experience in communications systems product design, development, and applications. Background includes voice and data systems planning, specification, feature definition, and product analysis. Monitors technical activity and specifications in the GSM, DCS-1800, AMPS, TDMA, CDMA, mobile data and related areas, and PCS-related regulatory activities. Responsible for preparation of a number of FCC filings. BS in mathematics.

#### EDWARD E. JUNGERMAN III

Director of WIST Product Management

Responsible for the foremost wireless simulation modeling and financial planning tool available in the industry. Experience includes telecommunications consulting, financial planning and PC computer systems design and integration, with expertise in all aspects of PC applications. BBA in finance and MBA in telecommunications.

#### C. JACKSON PFEFFER

Vice President

Twenty-two years' experience in multinational telecommunications business development and financing. Served as chairman and CEO of Texarkana Wire and Cable, and was vice president of strategic planning and corporate marketing for Ericsson, North America. Founder of microcomputer business early in PC industry history. BS and MBA.

#### K. RONALD VANCE

Director of WIST Development and Support

Responsible for ongoing product development, customer support and applications development for the *Wireless Industry Simulation Tool*. Served as Communications Manager at EDS with responsibility for data access service products, premises data services products, and EDS\*LINK products. Formerly Senior Manager of Program Planning at DSC Communications, with responsibility for DEX CS products, digital crossconnect systems, and class 5 switch development. Xerox engineer and manager. BSEE.

#### DR. JOHN C. BELLAMY

Telecommunications and Switching Systems Design, and Engineering

Twenty years' experience in systems research, design and product development. Background includes senior level management of voice and data switch system product development, and advanced digital radio system design and analysis.

Author of two editions of *Digital Telephony*, a text and reference addressing application and practice of digital technology for telephony systems. Ph.D. in electrical engineering.

#### LAWRENCE RAGAN

Advanced Design of RF Systems and Products

Twenty-eight years' experience in telecommunications, and holds 13 patents on advanced RF components and systems. Invented and designed a synthesized, frequency-agile receiver in a wristwatch pager using time, frequency, and geographic diversity. Co-founder of RF Monolithics. BA, BSEE and MSEE. Registered professional engineer.

#### DR. MARY C. HARRISON

Market Research and Strategic Planning

Over 20 years in market research and strategic planning, including studies in microwave, satellite, fiber optics, cellular and land mobile businesses. Conducted marketing feasibility studies for fiber optics systems. Extensive research and planning for local and long distance carriers, and satellite and microwave equipment manufacturers. Ph.D. in marketing.

#### PHILLIP A. SNEDECOR

Director of Sales

Over 30 years' experience in telecommunications and computers. Experienced with wireless product and services sales, computer systems, synchronous data display terminals, ISDN applications products, RBOC operational support systems, and switching system field service organizations. BSEE.

#### RICHARD A. FOX

Systems and Software Development, Enhanced Services Systems and LANs

Twenty-three years' experience in software and systems development, in telecommunications, personal computers and LAN-based systems. BSEE and MBA. Registered professional engineer.

#### DR. M. GRAVES PFEFFER

Accounting and Financial Planning

Eighteen years' experience in financial reporting and analysis, including accounting system design and installation for Fortune 500 companies and smaller organizations. Line responsibility as controller, audit, systems and accounting management, with major university staff and research experience. Ph.D. in accounting. CPA and CMA.

#### THOMAS G. TREGONING

Strategic Analysis, Collateral Development and Industrial Design

Twenty-three years' experience in the telecommunications and computer industries, including marketing, planning, and systems engineering. Business development in fiber optics applications, wireless emergency services, and global positioning systems. Graphics for major publications, and industrial product design. BS in mechanical engineering.

#### DR. JAMES E. GUNN

Digital Signal Processing, Speech Processing and Advanced Telecom Subsystem Design

Over 20 years' experience including technical support management for system level CAD products, modems, telecommunications/ISDN, signal processing, linear ASIC, interface and linear products. Ph.D. in electrical engineering. Registered professional engineer.

#### MONICA U. GARCIA

Research, Editing, and Collateral Development

Over 10 years' experience in writing and editing corporate publications and advertising, with responsibility for collateral materials production.

Conducts research for engineering staff. BA in journalism.

#### Staff

Impulse has a well-rounded staff of seasoned professionals who combine significant business experience with a solid foundation in the telecommunications industry and its technologies.

Backgrounds include executive management and senior level technical leadership in major corporations and entrepreneurial companies.

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